

Therefore, the user of the portable computer can see a window screen through the first display module 31 and input information through the keyboard displayed on the second display module 34. When the user requests change of the language used for the keyboard (block S12), for example, when the user requests change from Korean keyboard to Japanese keyboard, the second display module 34 can display a changed keyboard (e.g., a Japanese keyboard) according to the request of the user (block S13).

Further, in the first display mode in which the first display module 31 displays a window screen image and the second display module 34 displays a keyboard image, a user can request change from the current first display mode to the second display mode (block S14). Accordingly, the dual display type of the second display mode that can be set in advance or additionally selected by the user is supported.

For example, when the vertical dual display type as shown in FIG. 5 has been confirmed (block S15), the portable computer vertically displays a window screen image (e.g., an integrated or scrollable display) on the first display module 31 and the second display module 34 (block S16). In contrast, when the horizontal dual display type has been confirmed, portable computer horizontally displays a window screen image (e.g., an integrated or scrollable display) on the first display module 31 and the second display module 34 (block S17). In addition, other variations of display types can be provided for in each of the first and second display modes (e.g., corresponding separate split screens).

In the vertical or horizontal display of the first display module 31 and the second display module 34 described above, either an independent image may be displayed on each of the first display module 31 and the second display module 34 or divided portions of one large integrated screen image such as a dynamic video may be distributed and displayed on the first display module 31 and the second display module 34. Using such an integrated screen image approach, the user can see a movie with a large screen or conveniently perform such work as CAD or Spread Sheet.

Also, in the second display mode in which both the first display module 31 and the second display module 34 can display at least one window screen image, when the user requests change from the current second display mode to the first display mode (block S18), the second display mode is changed to the first display mode, so that the first display module 31 displays a window screen image and the second display module 34 displays a keyboard image. Such described processes can be repeated until the system is off (block S19).

Operations of a dual display type portable computer according to an embodiment of the present invention will now be described. In using the portable computer according to embodiments of the present invention, the first unit 30 and the second unit 33 may be posed with various angles with respect to each other. For example, when the portable computer is used in such a manner as a general notebook computer, the second unit 33 may be unfolded from the first unit 30 with an angle as shown in FIG. 2.

Further, the first display module 31 and the second display module 34 may be completely unfolded from each other to be placed in the same plane (e.g., display screens). In this configuration, the first display module 31 and the second display module 34 can display divided portions of one integrated image in a prescribed relation.

Relative rotation of the first unit 30 and the second unit 33 according to an embodiment will be described below with reference to FIGS. 7a to 7e. First, FIG. 7a shows a state in which the first unit 30 and the second unit 33 overlap each

other. In this state, the hinge link 43 can extend from the first unit 30 to the second unit 33 with a prescribed inclination. Also, the movable hinge bracket 53 can extend with the same inclination as that of the hinge link 43.

When the second unit 33 starts to be unfolded from the first unit 30 from the state described above, the hinge link 43 preferably rotates about the first hinge shaft 45 simultaneously while the guide section 55 of the movable hinge bracket 53 moves relatively to the hinge link 43. At the same time, the movable hinge bracket 53 can rotate about the second hinge shaft 67. FIG. 7b shows a state in which the second unit 33 has been unfolded from the first unit 30 with an acute angle.

When the second unit 33 goes on rotating, the first unit 30 and the second unit 33 can experience the states shown in FIGS. 7c and 7d. In the states shown in FIGS. 7c and 7d, the first unit 30 and the second unit 33 can be prevented from being too easily rotated due to friction between the first hinge shaft 45 and the first hinge cylinder 39 and between the second hinge shaft 67 and the second hinge cylinder 69. However, the present invention is not intended to be so limited.

Further, the central portion of the stopper 63 engaged with the stopper groove 47 prevents the second unit 33 from being lowered along the hinge link 43 by its own weight. The location of the stopper groove 47 with which the central portion of the stopper 63 can be engaged changes according to the rotation of the second unit 33 with respect to the first unit 30.

FIG. 7e shows a state in which the first display module 31 of the first unit 30 and the second display module 34 of the second unit 33 are placed in the same plane. In this state, the hinge link 43 can extend through the first hinge slot 51 and the second hinge slot 52 formed through the rear surfaces of the first unit 30 and the second unit 33.

Preferably engagement protuberance 49 can be engaged with a lower end of the engagement protuberance channel 59 when the rotational radius becomes open or a maximum during the rotation of the first unit 30. Beneficially, such construction can reduce or minimize the length of the hinge link 43 and can prevent the first unit 30 and the second unit 33 from being separated even without another construction for assembling the first unit 30 and the second unit 33 with each other.

Although embodiments of the present invention have been described for illustrative purposes, those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the invention as disclosed in the accompanying claims. For example, construction of the stopper 63 and the stopper grooves 47 described above, which allow the second unit 33 to be unfolded and posed only at several predetermined angles with respect to the first unit 30, may be modified. That is to say, the stopper 63 may be disposed in elastic and tight contact with the hinge link 43 without the stopper grooves 47. In such a construction, the angle between the first unit 30 and the second unit can continuously increase when the second unit 33 is unfolded from the first unit 30, and the second unit 33 can be held at any angle with respect to the first unit 30 while the second unit 33 is unfolded from the first unit 30.

Further, the hinge link 43 and the movable hinge bracket 53 may be disposed on outer surfaces of the first unit 30 and the second unit 33, which can make the first hinge slot 51 and the second hinge slot 52 unnecessary. In such a case, it will do if the first hinge shaft 45 and the second hinge shaft